APPEADIX I

TIM

DESCRIPTION

TOTAL

The Contractor shall furnish the necessary personnel, supplies, familities, consultants, and shall do all other things necessary to perform the following work and services within the shortest possible time, communate with the magnitude of the problem and the maximum number of qualified personnel which can be brought to bear upon the problem:

- l. Conduct studies of a theoretical and experimental nature to determine the feasibility of constructing an automatic or semi-automatic celestial mavigation system for use in high altitude aircraft. Such system shall consider the problem of obtaining maximum accuracy with a minimum weight and requiring a minimum of time and attention of the operator. The design objectives to be met by such navigational system in terms of weight of the system, automatic features, operating area limitations, maximum tolerable error, and similar parameters shall be those to be agreed upon between the contracting parties. The completion date for these studies shall be I December 1955.
- Prepare and furnish the preliminary design and layout of a sextant suitable for installation in the designated aircraft, such centant representing the first approach to the solution of the celestial savigation system problem referred to in Item 1, above. In the event this approach is accepted by the Government, the Contractor shall present the design objectives of such sextant, including sketches and engineering drawings showing the master layout for installation in the aircraft, optical train shetches and drawings, and similar information, including estimated weight,

operating methods and conditions and other pertinent parameters. The Contractor shall also present information regarding cost and time required to produce a prototype of the above referred to sextant. The preliminary design and layout shall be submitted on or about 19 December 1955.

- In addition to the specific work under this contract in connection with the sextant referred to in Item 2, above, the Contractor shall continue the feasibility studies having to do with celestial navigational systems based on utilisation of sun spots and on the feasibility of observing stars in the daytime. A final report shall be submitted by the Contractor to the Government by 25 February 1956, such report to present in all necessary detail the work done under this contract with respect to all feasibility studies of the various celestial navigational systems studied.
- Design and construct two (2) prototype units of an aircraft sextant in accordance with the preliminary design and layout accepted by the Government and the Contractor's proposal dated 17 December 1955, which is incorporated herein by reference. Delivery of the first prototype unit shall be made on 21 February 1956; the second prototype by 27 February 1956.

Such other costs incident to the above work and services as may be incurred to and including 29 February 1956, which are necessary to support the Government's needs under this contract, and which are approved by the Contracting Officer, will be allowable costs hereunder.

> Total Contract Price (Subject to the provisions of Part IV "Price Redetermination" of the Schedule.)

\$124,000.00